Water Quality Standards Advisory Committee
Meeting Minutes
October 26, 2004

Members Present:

Marjory Swope	NH Association of Conservation Commission
William Beckwith	US Environmental Protection Agency
Phil Bilodeau	NH Water Works Association
John Dreisig	NH Public Health – Risk Assessment
John Hodsdon	NH Farm Bureau
Eileen Miller	NH Association of Conservation Districts
June Hammond Rowan	NH Office of Energy and Planning
Michael S. Giaimo	Business and Industry Assoc. of NH

Members Absent:

Wendell Berry	NH Lakes Association
Steve Clifton	Consulting Engineers of NH
Robert Fawcett	NH Fish & Game
Tim Fortier	NH Travel Council
Nancy Girard	Conservation Law Foundation
Donna Hanscom	NH Water Pollution Control Association
Ken Kimball	Appalachian Mountain Club
Vernon Lang	US Fish and Wildlife Service
Bill McDowell	University of New Hampshire
Carl Paulsen	NH Rivers Council
Peter Rice	NH Municipal Association
Jason Stock	NH Timberland Owners Association

Others Present:

Rodney Bartlett	Town of Salem
Chip Chesley	City of Concord
Victoria DelGreco	Town of Exeter
Jim Donison	City of Concord
John F. Dumas	Town of Hanover Water Works
Richard Hannon	Canobie Lake Protective Association
William Heinz	Granite State Hydropower Assn.
Victor Krea	Wright-Pierce
Mike Metcalf	Underwood Engineers
Allan Palmer	PSNH
William Schroeder	Canobie Lake Protective Association
Anthony Zuena	SEA Consultants, Inc.

DES Staff Present:

Paul Currier	Administrator, Watershed Management Bureau
Bob Estabrook	Watershed Management Bureau
Marie LosKamp	Executive Secretary, Watershed Management Bureau
Jillian Jones	Watershed Management Bureau

I. Introductions and Acceptance of September 14, 2004 Draft Minutes

- **Marjory Swope, Chairperson, opened the meeting at 1:35 pm. The first order of business was the discussion and acceptance of the minutes from the last meeting. Are there any corrections, additions or deletions?**

Marjory asked what the dots at the end of statement by Paul on page 5 meant. The meaning was that his sentence was cut short and the statement wasn't finished. Marjory also pointed out a misspelling of a word on page 3.

- **A motion was made by Philip Bilodeau to approve the minutes as amended. The motion was seconded and approved by committee members in attendance.**

II. DISCUSSION/QUESTIONS ON MEETING DOCUMENTS – Paul Currier

Paul went over the documents that were either sent or handed out to the members and attendees. They received two documents of draft language for rules for water transfers and nutrients, and for turbidity and time dependent modeling. Just to be clear in the future, these are the versions of what we have already discussed and that we will go back to again as soon as we have worked through antidegradation. Antidegradation goes along with the draft rule language. It is our intent to document where we stopped and pick up when we are ready to go to JLCAR.

> ***Tony*** *– Nutrients, 1703.14(c), existing discharges containing either phosphorus or nitrogen which encourage cultural eutrophication … – Tony distinctly recalls that DES would not define cultural eutrophication; Bill Schroeder was uncomfortable with it and would propose something else.*
>
> ***Paul -*** *Those words should be deleted pending further discussion. For the time being that term is not there. It should have gone away.*
>
> ***William Schroeder*** *– Set aside for now the discussion of the proposed rules and cultural eutrophication and recapturing what was said. Bill would rather not do that now but deal with antidegradation first. We cannot fully discuss these without having first decided on antidegradation.*
>
> ***Paul*** *- Bill wasn't the only one that didn't want it (cultural eutrophication) to go away but Bill was the only one who sent in his written comments It should have made the agenda but didn't. We will discuss under other business.*

III. EXISTING USES DISCUSSION PAPER – Paul Currier

Existing uses under Clean Water Act are listed. We need to have a discussion of whether EPA would find this acceptable. DES would think that any existing use is contained in or fully supported by criteria that exist for designated uses and therefore DES would not do a separate Tier 1 antidegradation review.

> ***Anthony Zuena*** *– Has it been submitted to EPA?*
> ***Bill Beckwith -*** *We should talk about it. There is the issue of continuum of uses for partial periods of time in the NH Standards under Existing Uses.*
> ***Paul –*** *We will have those discussions with EPA.*

Background publications that you were sent: EPA approval letter, last time was in 1999, background of what was important at that time. Antidegradation is somewhat dated: more than ten years old. Chapter 4 from river's organization is good and accurate background; two examples of 401 certifications; i.e. stream bank restoration project, an example of our current format; and a town construction of a treatment plant with extensive conditions: an example of how we do those. Transfer

from one waterbody to another waterbody or from a waterbody to a plant – goes directly to the plant on another waterbody. Withdrawal on the donor waterbody on the Lamprey River from the Oyster River. Wetland permit - good example of 401 that applies to construction. It was a state SPGP wetlands permit and the National Park Service (which administers federal Wild and Scenic rivers) said we had not done a 401 certifications, and then we stepped back and issued this.

One of the documents you received before the meeting is the March '95 401 water quality certification rules - expired rules - just as background. We are not using the expired rules, not even as a base for the new rules. We are offering new rules.

> ***Marjory*** *– That might be a problem.*

There is a situation where it has been challenged on a project in Greenland. Clean Water Act requires certification, no provision in state laws to make rules, we have a long standing process and we will continue to use it while we develop new rules.

The purpose of the 3 flow charts - this is the 401 review process that we are writing rules around. The process you see in flow charts will be described in the 401 rules. The existing Uses discussion paper is what we will talk more with EPA about.

Water Quality draft decision rules – there was a lot of discussion relative to existing uses versus designated uses. They vary from waterbody to waterbody. Designated Uses – they are accurate and correct based on statute and our regulations. In the case of swimming it applies to all surface waters. There is a process to remove uses from a particular waterbody, called use attainability analysis, if it (attainment of criteria to support the designated use) is not feasible for social and economic reasons and it goes through a study process. EPA has to approve it before that can happen.

Hint of what is to come – you cannot remove Existing Uses. Existing and designated uses are not the same.

> ***Bill Beckwith*** *– Feasibility test - it is not a reasonability test. There is some but not a lot of experience here in New England.*

IV. 401 WQ CERTIFICATION RULES – <u>Paul Currier</u>

A. EXPIRED RULES
B. DRAFT DECISION PROCESS FOR NEW RULES

Go to flow charts - flow charts one and three first. First antidegradation review, Paul walked through the proposed process for 401 certification of how it would work and an idea of what the current process is and what part we would propose to be new.

For NPDES permits, antidegradation review is done by George Berlandi's group. We are proposing to overhaul the process for 401 certification for NPDES permits including antidegradation review.

Tier 2 and tier 3 waters:

Tier 2 waters are high quality waters – waters that are of significantly higher quality than required to just meet the standard – one of the issues is how do we determine that (what high quality waters are)? High quality waters will be determined parameter by parameter.

Tier 3 is outstanding resource waters. The requirement in federal rules is no degradation except for short term for the construction of the project. Example might be a logging process in which water quality might be lessened while logging operation was in progress but would be returned to pre-existing quality once it was finished.

> ***Phil Bilodeau*** *– I thought existing water transfers would be grandfathered, and would not need antidegradation review.*
>
> ***Paul*** *- What we have said to the water suppliers with existing transfers is there would be no antidegradation review. The 401 certification process applies to proposed activities. For existing transfers, they are not proposed, they are existing. We will not do a 401 certification or do an antidegradation review for existing water transfers because they are not new discharges.*
>
> ***Anthony Zuena*** *– I came to a completely different conclusion from what you said. Clearly different from what you said but the flow chart takes you there. Antidegradation for all the other design uses antidegradation does apply; key phrase is no additional loading. Impaired waterbody is not a high quality waterbody, no additional loading until a TMDL plan and then comply with the TMDL.*
>
> ***Bill Beckwith*** *– For an impaired waterbody, unlike Tier 2, there is no additional capacity to allocate, so the effort is to ensure that you have no increased loading, factor in reduction of loadings (after a TMDL is done) to attain uses. So you can't do an antidegradation review (on an impaired waterbody).*
>
> ***Paul*** *- Example: Hampton Harbor – bacteria has to be reduced by 50 percent. It comes from various places, municipal, storm water, sewer and lots. Redo drainage system so that you can say you are reducing pollutants.*
>
> *What if it is woodland? Roads and so on drain to an outstanding resource water.*
> *We are not proposing any land use change. Tier 2 is only meaningful if you are looking for a new or increased loading. No reason that Tier 2 is not applicable and you will be asked to alter your activity. With Tier 2 water quality is better than the minimum standards, and social and economic considerations must be used to justify degrading water quality. All are related but different topics.*
>
> ***Phil Bilodeau*** *- What is permitted and what is designated. The NH water suppliers' transfer some of those and are legislatively denied the opportunity to fish or swim.*
>
> ***Paul -*** *Designated use does not have to be an existing use.*
>
> ***Bill Beckwith -*** *You have introduced another topic.*

Designated uses are uses aside from that by state or local policy outside of the CWA that have restricted water uses. Unless state conducts a use attainability study, under the CWA, the state would still have to show that water meets that use, whether or not the use is allowed. Full body immersion on a limited or frequent basis.

For example, fishing for aquatic life may not be allowed but state must protect the aquatic life even if you cannot fish for it.

Flow chart #1 - Put an asterisk, *not applicable to existing water supplies*. Paul will have to do a 401, and under the federal law, we can waive it. Waive our right to certify and EPA can issue the permit. DES has a year from when they make application to issue a 401. On FERC license it sometimes happens that the 401 cannot be issued within a year. The applicant and withdraw and reapply to restart the clock on the 401 review.

> ***Bill Beckwith*** *– Caution to existing transfers and the water quality of your water transfer, very clean has no impact on the water could in the recent future water could deteriorate in the watershed from where you are transferring it from to where you are transferring it to. They would have a potentially lowering of water quality that should be reviewed. One transferring water intuitively would have a vested interest in how water in the source watershed is being managed, i.e., source water protection.*

Could you say that the donor water quality or any development (in the donor watershed) that comes on line would be to the detriment of the water that you are putting it into. A discharge permit is the issuance that triggers 401 whether antidegradation review would alter what they can certify. Any 401 certification for a federal permit whether it impacts or not, certifies that WQS would be met. In other instances they would have to put stipulations on it.

> ***Alan Palmer*** *- Flowchart #1 – DES is going to waive antidegradation for existing discharges that have no increased loading?*
>
> ***Bill Beckwith*** *– If we are issuing a FERC permit, sometimes we will do something in a 401 that says standards will be met, something more stringent that meets the state's standards, we have done more than what was stipulated in a state's certification.*

We can treat (NPDES permits for) existing water transfers so that they will require 401 certifications but not require antidegradation in order to make that certification.

A water supplier in the 401 process may be concerned that this will not happen and yes, until you have a NPDES permit in hand there is a risk.

You could have a transfer of water, the data shows it negatively impacting the (receiving) water, just as we don't continue to re-permit waste water discharges at the same level, the same thing could be an activity that isn't compatible with the uses of the receiving water. EPA would be hard pressed to re-issue a permit (if this happens).

> ***Tony*** *– Some water supply folks are worried about if an existing transfer is degrading the receiving water there is a potential that they would have to improve the conditions of the water being transferred to the new water.*
>
> ***Paul –*** *It is the same case now when a load allocation is done, same for Canobie, all the sources of phosphorus are part of the equation, (and must be reduced) so that excessive algae growth goes away. All activities in the watershed would have to be considered and one of the conditions may be that some sort of treatment would be required to the water being transferred.*

It is at best unclear when you make the comment that existing transfers will be allowed to continue but in order for transfers to continue it may be cost prohibitive to make the water coming in equal in quality to the receiving water for all impaired waterbodies so that the impairment ceases in the future. Water transfers are not exempt from that process.

Flow chart 3 is where you can deal with people that have water supply transfers. Go from one to three not stop at 2, flow chart 3 is the important one.

One other point on #1, does the water body meet standards (under pre-project conditions)?

We don't do that now, but we have required baseline sampling, and usually applicant's sampling is not sufficient (to assess the affected waterbodies). (Under the process on the flow chart) If we don't know the assessment status, you go out and get data then we can tell how it fits in the flow chart.

> ***William Schroeder- at that point – double pointed arrow - comes back into the top of the decision tree.***
>
> ***Allan Palmer*** *– Where is that going to be documented for posterity? Where does it state that you will skip chart 2 and go to chart 3? We would expect that to be documented so that there is a documented process.*

Flow chart 3 - Most of this flow chart is the current process. We have assessment units for designated uses that meet water quality standards. The existing water quality meets WQS, construction will not violate those standards, and we draft conditions for construction, do we need monitoring to do an assessment during construction or after construction while in operation.

If we think (construction and operation of the project) will meet standards we issue a draft certification for comment, and we put draft certificate on our web site for everyone to see it. The process in the expired rules was that someone can request a hearing to submit additional information that was not considered in draft, (e.g.Tamworth racetrack) we would then examine information received at the hearing, we would go back after hearing, then issue a responsiveness summary of the hearing and then a final certification.

We will define in the rules abutters or someone else affected by the water transfer, a riparian owner affected by the project – something like that.

On to antidegradation review: this is new.

> ***Anthony Zuena -*** *For a proposed project modification as opposed to a new project, they would all start with flow chart 1?*

Durham already has a 401 – It will come around again if they need another wetlands permit, and the 6 year cycle (for 401 renewal in the old rules) will go away. 401 certifications for FERC licenses have a 50 year life. Certification for wetlands permits is indefinite. A certification for a project involving a water transfer would be good as long as there is a water transfer. Wetlands permit gave us the opening (to place conditions on operation of the project). The certification was for the wetlands permit, but not for water transfer itself, and we review the entire project at the same time. The issue was the withdrawal from the Lamprey River and that is what makes the 401 such a far reaching process.

For (state) wetlands permits – what we do is we review the incoming stream of wetlands applications to the agency and the Corps meets with the state and decides which ones they are going to do. If the state does it wetlands sends up for 401 if they have issues. We can only certify federal permits.

A 401 is issued for the life of the project or until the federal permit expires. For a water transfer an NPDES permit is required and it has a 5 year life and at the end there is a review if the applicant has applied to extend, and the old permit stays in existence until the new permit is issued.

There are two court cases that should decide this issue. One is South Florida Water District and the other is the City of New York, in both of those cases they have claimed that NPDES permits are not needed for water transfers. The Loon Mtn. decision may get trumped.

Durham – they do not need to get a NPDES permit (because they transfer water directly to their water treatment plant), but if they choose to use their pipeline to transfer into the Oyster River they will need a NPDES permit.

Antidegradation – This is new but we have done antidegradation on individual permits but we have never done a complete (including social and economic justification) antidegradation review on any permit. (In the past) there has been no public input, and no cultural eutrophication analysis done.

We start antidegradation review if there are tier 3 waters. First the three decision boxes under tier 3 we propose for Advisory Committee discussions, and put together words on discussion papers on how to do those.

> ***Anthony Zuena*** *– I93 - final increase in phosphorous as a result of additional paving, Salem, additional TMDL as a result of the additional phosphorus, how would these be worked out in antidegradation review? If impaired there cannot be any additional loading. TMDL - no additional loading of phosphorus to Canobie Lake.*

That is the position we have taken with salt to DOT, phosphorus requirement that there be no additional loading.

In the way they have addressed other contaminants but salt, constructing (BMPs for) better water quality after four lanes than with two, but we didn't look at numbers in respect to Canobie Lake. In some places (along the I-93 corridor) there is no room to put spreaders.

> ***Marjory*** *– We should invite DOT.*

Tier 3 - Bring tier 3 for discussions, Forest Service has to be here for that. For tier 2 the first decision, diamond on chart, draft methodology to committee needs full review that we propose for discussion with a separate flow chart done for that. Factors list - that would make the project significant anyway, if no, go on to flow chart 3.

> ***William Schroeder*** *– Mean significant in the way that term, you need to underline, there is a specific factors' list on a slide last item, bold or footnote it for now.*

- **What we would propose for next meeting: write discussion papers - where waterbodies are high quality or not and draft of 401 that coincides with the flow chart 401 rules - on how we make decision on WQ for antidegradation - draft how we determine assimilative capacity.**

We've thought about that for dissolved oxygen and toxics but there are other pollutants that we aren't so good at.

All waters have designated uses and all waters have criteria. No differences in the uses.
There are some differences in criteria.

V. Other Business

William Schroeder had a proposal for evaluating cultural eutrophication and some further discussions on it. The task at hand is if there is a threshold (for P loading that constitutes cultural eutrophication) what is it? What we can do is to use Canobie Lake as an example of natural phosphorus loading, and do some computations for loading.

The language *what is contributing in a reasonable way*, maybe we should pick another lake, and we don't have to pick Canobie Lake.

Next Meeting:

Tuesday, November 30th at 1:30 pm

Motion to Adjourn:

- **Marjory - Do I have a motion to adjourn?**

Phil made a motion to adjourn, motion seconded by Bill, all in favor of adjourning meeting, vote was unanimous.

Meeting Adjourned at 3:15 pm.